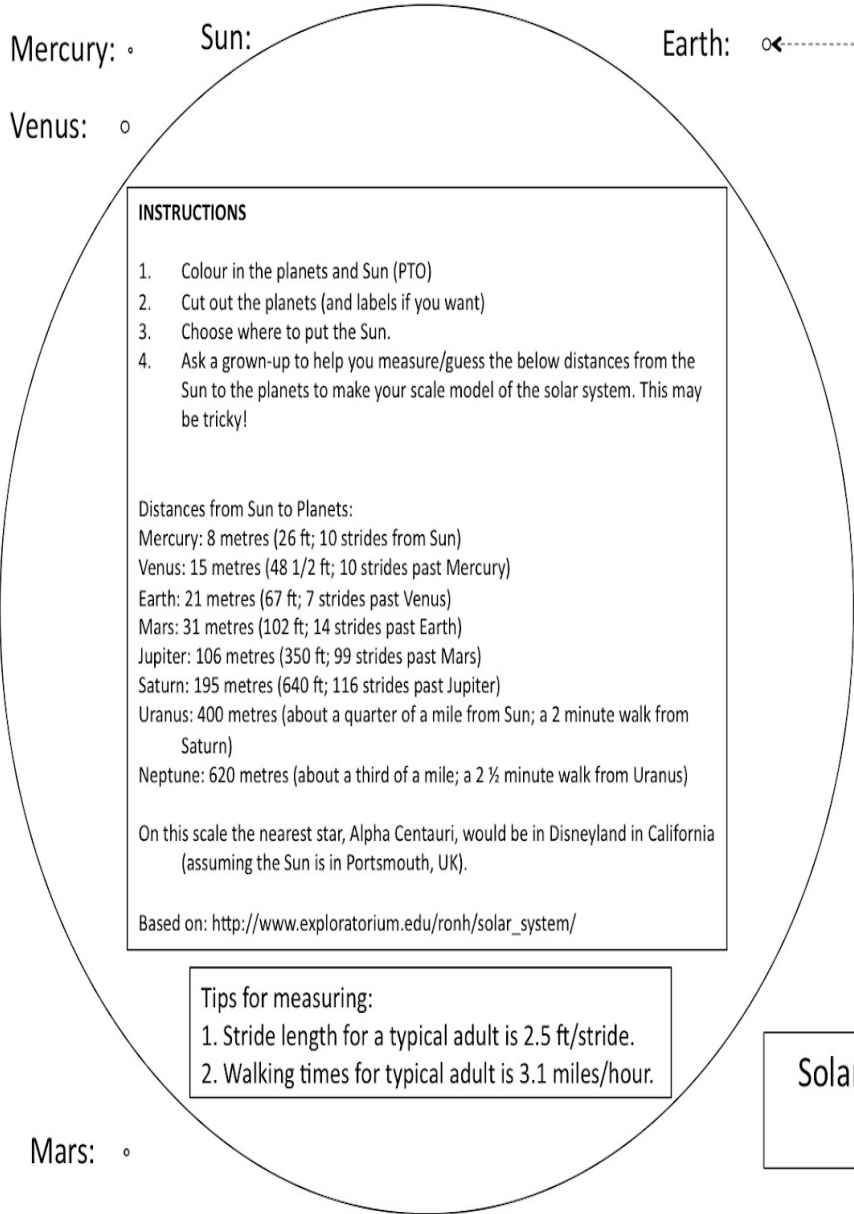


Mercury: ◦

Sun:

Earth: ◦ ←-----→ : Moon

Venus: ◦



INSTRUCTIONS

1. Colour in the planets and Sun (PTO)
2. Cut out the planets (and labels if you want)
3. Choose where to put the Sun.
4. Ask a grown-up to help you measure/guess the below distances from the Sun to the planets to make your scale model of the solar system. This may be tricky!

Distances from Sun to Planets:

Mercury: 8 metres (26 ft; 10 strides from Sun)

Venus: 15 metres (48 1/2 ft; 10 strides past Mercury)

Earth: 21 metres (67 ft; 7 strides past Venus)

Mars: 31 metres (102 ft; 14 strides past Earth)

Jupiter: 106 metres (350 ft; 99 strides past Mars)

Saturn: 195 metres (640 ft; 116 strides past Jupiter)

Uranus: 400 metres (about a quarter of a mile from Sun; a 2 minute walk from Saturn)

Neptune: 620 metres (about a third of a mile; a 2 1/2 minute walk from Uranus)

On this scale the nearest star, Alpha Centauri, would be in Disneyland in California (assuming the Sun is in Portsmouth, UK).

Based on: http://www.exploratorium.edu/ronh/solar_system/

Tips for measuring:

1. Stride length for a typical adult is 2.5 ft/stride.
2. Walking times for typical adult is 3.1 miles/hour.

Jupiter: ◯

Saturn: ◯

Uranus: ◯

Neptune: ◯

Mars: ◦

Solar System Scale Model

(by Dr. Karen Masters, UoP)

Print on A4 paper.